

U70 BIKE SERVICE MANUAL

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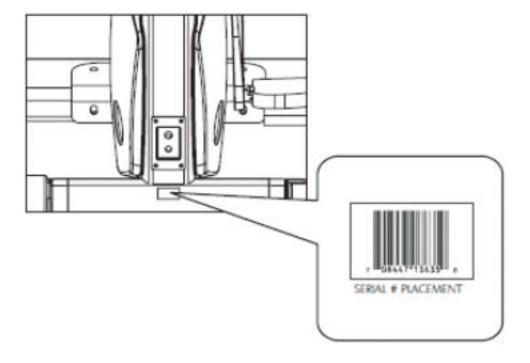
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CHAPTER 1: SERIAL NUMBER LOCATION

1.1 SERIAL NUMBER LOCATION



CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.1 BEFORE GETTING STARTED

The Vision Fitness U70 Bike is intended for commercial use. To ensure your safety and protect the equipment, read all instructions before operating the bike.

CHOOSING A SITE

The site should be well lit and well ventilated. Locate the Vision Fitness U70 Bike on a structurally solid and flat surface. The bike should have a clearance of 20" on one side and behind the unit, and 12" on the other side from the wall or other equipment. This zone is to allow easy access to the bike and gives the user an easy exit path from the machine. If the site has a heavy plush carpet, to protect the carpeting and machinery, you should place a rigid plastic base under the unit.

Please do not place the Vision Fitness U70 Bike in an area of high humidity, such as the vicinity of a steam room, indoor pool, or sauna. Exposure to intensive water vapor or chlorine could adversely affect the electronics, as well as other parts of the machine.

MOVING THE BIKE

Your Vision Fitness U70 bike has transport wheels included for ease of mobility. To move your Upright Bike, firmly grasp the rear of the frame assembly, or the rear of the seat rail. Carefully lift and roll on the transport wheels. You can also firmly grasp the handlebars and carefully tip the bike towards you and roll on the transport wheels.

CAUTION:

Vision Fitness bikes are well built and heavy, use care and additional help if necessary. This bike can weigh up to 160 lbs.



CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.2 READ AND SAVE THESE INSTRUCTIONS

To ensure your safety and protect the equipment, read all instructions before operating the Vision Fitness U70 Bike.

To ensure proper use of the Vision Fitness U70 Bike, make sure that all users read this manual. Remind the users that before undertaking any fitness program, they should obtain complete physical examinations from their physicians. If, at any time while exercising, the user experiences dizziness, pain, or shortness of breath, nausea or feels faint, he or she must stop immediately.

- * This bike is only to be used for its intended purpose described in this manual. Do not use attachments that have not been recommended by Vision Fitness.
- * Never drop or insert objects into any opening. Keep hands away from moving parts. If the item cannot be reached, contact a Vision Fitness authorized dealer for assistance.
- * Never operate the unit if it is damaged, not working properly, when it has been dropped, or has been dropped in water.
- * Keep hands and feet clear at all times from moving parts to avoid injury.
- * Do not use this product outdoors, near swimming pools or in areas of high humidity.
- * Do not operate where aerosol (spray) products are being used or when oxygen is being administered.
- * Do not use this product in bare feet. Do not wear shoes with heels, leather soles, cleats, or spikes while exercising.
- * Do not remove the side covers. Service should only be done by an authorized service technician.
- * Close supervision is necessary when used near children, invalids, or disabled people.
- * When the bike is in use, young children and pets should be kept at least 3 meters / 10 feet away.
- * Assemble and operate the bike on a solid, level surface.
- * Never face backward while using the Vision Fitness U70 Bike.
- * Use the stationary handlebars when mounting or dismounting the bike.
- * Do not wear clothing that might catch on any moving parts of this bike.

CAUTION! If you experience chest pains, nausea, dizziness, or shortness of breath, stop exercising immediately and consult your physician before continuing.

CAUTION! Any changes or modifications to this equipment could void the product warranty.

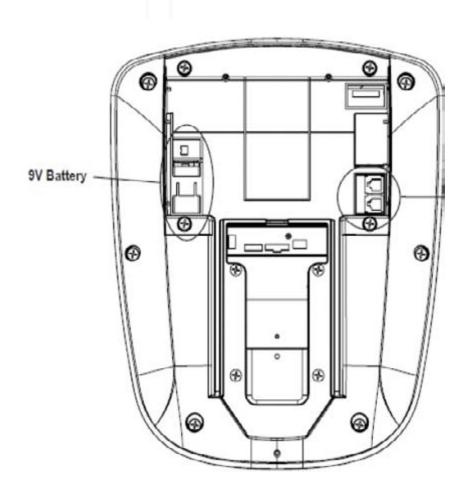
CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.3 ELECTRICAL REQUIREMENTS

SELF POWERED FEATURES:

The Vision Fitness U70 Bike is a self-powered unit, requiring no external power source. When a user pedals at a speed above 20 revolutions per minute, the power is generated to allow the bike to function properly. Because of this self-generating feature, the console feedback will fade away when you cease pedaling. The console does use a 9 volt battery as a backup to save your feedback information for 30 seconds from the time you stop pedaling. If you resume pedaling within the 30 seconds, the information will reappear. If the information does not appear within the 30 seconds, your battery may need to be plugged in or replaced.

BATTERY - The battery is located on the backside of the console and is enclosed by a removable cover.



CHAPTER 3: PREVENTATIVE MAINTENANCE

3.1 RECOMMENDED CLEANING TIPS

Preventative maintenance and daily cleaning will prolong the life and look of your Vision Fitness U70 Bike

Please read and follow these tips.

- Position the equipment away from direct sunlight. The intense UV light can cause discoloration on plastics.
- Locate your equipment in an area with cool temperatures and low humidity.
- · Clean with a soft 100% cotton cloth.
- Clean with soap and water or other non-ammonia based all purpose cleaners.
- Wipe pedals, console, heart rate grips, and the handlebar clean after each use.
- Do not pour liquids directly onto your equipment. This can cause damage to the equipment and in some cases electrocution.
- · Adjust leveling feet when equipment wobbles or rocks.
- Maintain a clean area around the equipment, free from dust and dirt.

3.2 CHECK FOR DAMAGED PARTS

DO NOT use any equipment that is damaged or has worn or broken parts. Use only replacement parts supplied by Vision Fitness.

MAINTAIN LABELS AND NAMEPLATES. Do not remove labels for any reason. They contain important information. If unreadable or missing, contact Vision Fitness for a replacement at 800-335-4348 or www.visionfitness.com.

MAINTAIN ALL EQUIPMENT. Preventative maintenance is the key to smoothly operating equipment. Equipment needs to be inspected at regular intervals. Defective components must be kept out of use until they are repaired. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.3 CARE AND MAINTENANCE INSTRUCTIONS

In order to maximize life span, and minimize down time, all Vision Fitness equipment requires regular cleaning, and maintenance items performed on a scheduled basis. This section contains detailed instructions on how to perform these items and the frequency of which they should be done. Some basic tools and supplies will be necessary to perform these tasks which include (but may not be limited to):

- * Metric Allen wrenches
- * #2 Phillips head screwdriver
- * Adjustable wrench
- * Lint free cleaning cloths
- * Teflon based spray lubricant such as "Super Lube" or other Vision Fitness approved products.
- * Mild water soluble detergent such as "Simple Green" or other Vision Fitness approved products
- * Vacuum cleaner with an extendable hose and crevasse tool attachment

DAILY MAINTENANCE ITEMS

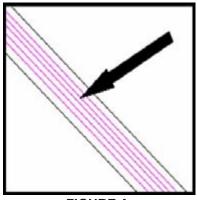
- 1) Look and listen for loose fasteners, unusual noises, and any other indications that the equipment may be in need of service.
- 2) Clean the bike before and after each use, including:
- a. Use a damp, soft cloth with water or mild liquid detergent to clean all exposed surfaces. DO NOT use ammonia, chlorine, or any acid based cleaners.
- b. Keep the console display free of fingerprints and salt build up caused by sweat.
- c. Frequently vacuum the floor beneath the unit to prevent the accumulation of dust and dirt which can affect the smooth operation of the unit.

MONTHLY MAINTENANCE ITEMS

- 1) Inspect the console, seat, pedals, and shrouds for damage.
- 2) Tighten the pedals onto their respective cranks using a 15 mm wrench.
- 3) Adjust leveling feet if equipment rocks or wobbles.
- 4) Inspect the grooves on the pedals for dust or dirt. Clean if necessary.

QUARTERLY MAINTENANCE ITEMS

- 1) Inspect the console mounting bolts for tightness, tighten if necessary.
- 2) Inspect the console, handrails, and handlebar for damage.
- 3) Remove the side covers and inspect the grooves on the belts and pulleys for dust or dirt. Clean if necessary (Figures A-C).



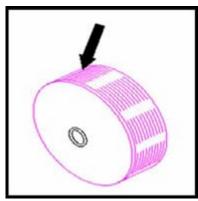


FIGURE A

FIGURE B

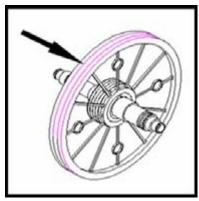
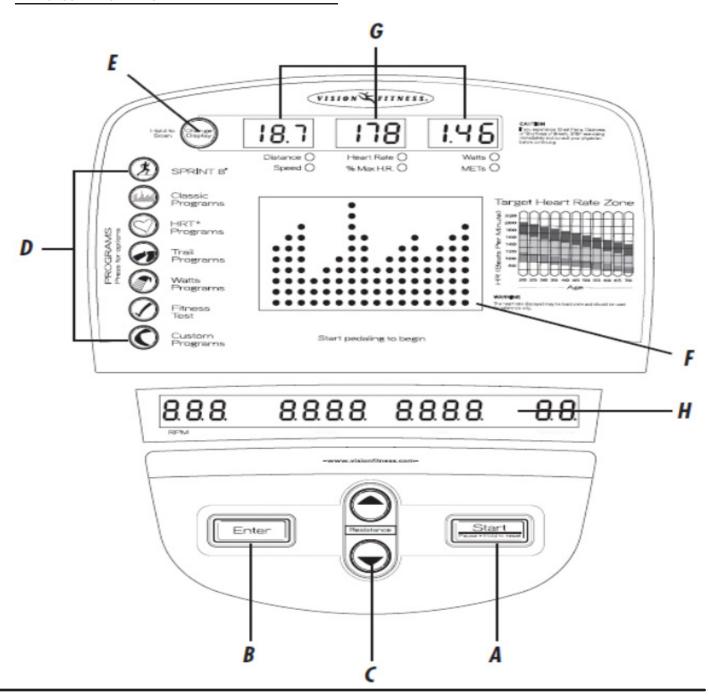


FIGURE C

4.1 CONSOLE DESCRIPTION



4.1 CONSOLE DESCRIPTION - CONTINUED

CONSOLE DISPLAY DESCRIPTIONS

A. START / HOLD TO RESET - Press the START key to begin a Manual workout immediately without having to set individual information. When the program begins, you have the ability to adjust resistance levels with the UP or DOWN ARROW keys. Feedback information will be calculated using the default settings.

PAUSE - If you need to pause your program during a workout, pressing the START key will pause your program for 30 seconds. Pressing START again will return you to your workout.

RESET - If you need to reset the console during your workout, you can do so by holding down the START key for 3 seconds or until the display resets.

- B. ENTER This key is used after entering each piece of information in setup such as age, weight, or level.
- **C. UP / DOWN ARROWS** These keys are used to change values in setup mode prior to your workout. During your workout, they are used to change workout levels. In HRT programs, they are used to change your target heart rate.
- **D. PROGRAM BUTTONS** These keys provide quick access to your favorite workouts. Press the PROGRAM keys repeatedly or use the UP or DOWN ARROW keys to select one of the multiple workouts.
- E. CHANGE DISPLAY / HOLD TO SCAN Press this key to change the display information. Press and hold the key to scan automatically between the two display options.
- **F. PROFILE DISPLAY** This window provides a dot matrix profile of the workout segments you are about to complete, as well as those you have already completed, and level of resistance for each segment.
- **G. FEEDBACK WINDOWS** These windows provide step-by-step instructions in the setup mode, instructions, feedback, and motivational messages during your workout.
 - **SPEED** The pedaling speed in miles or kilometers per hour.
 - **DISTANCE** The total distance traveled in miles or kilometers since the start of your workout.
 - WATTS A measurement of workload. One watt is equal to six kilogram meters per minute.
- METS A measurement of oxygen consumption. One MET equals the approximate amount of oxygen consumed per minute by a person at rest

HEART RATE / HRT FEEDBACK WINDOW - This window provides feedback on your current heart rate and the percent of your predicted maximum heart rate. It also includes your target heart rate when using one of the HRT programs.

NOTE - At the end of your workout, the totals will be displayed as an average of your total workout time. The only exceptions are distance and calories which are program totals.

H. MESSAGE WINDOW - This window provides step-by-step instructions in the setup mode, instructions, feedback and motivational messages during your workout.

TIME - The time elapsed or the time remaining in your workout.

RPM - The pedal rate or revolutions per minute (RPM).

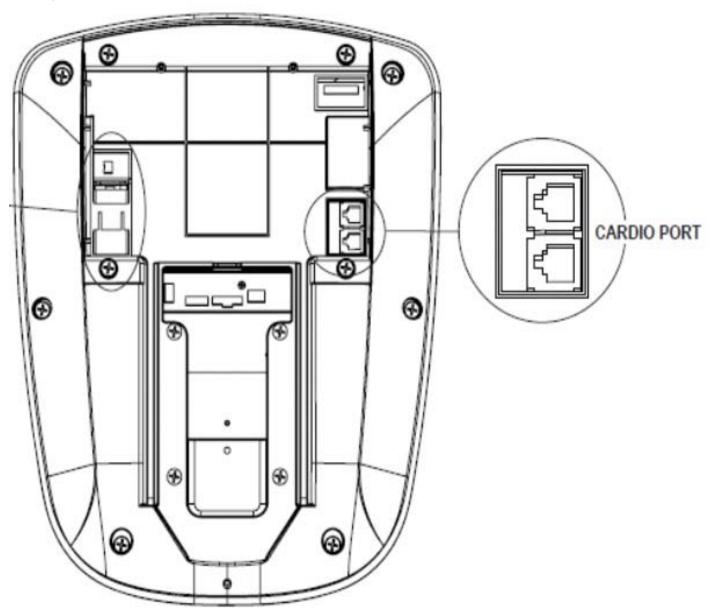
CALORIES - An estimate of calories burned since the beginning of the workout.

RESISTANCE - The current resistance level you are in.

4.1 CONSOLE DESCRIPTION - CONTINUED

CARDIO PORT

A cardio port is located on the back of the console that is compatible to entertainment protocol such as Cardio Theater. The bottom port is the active port to use for this function.



4.2 WORKOUT OVERVIEW	
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WORKOUT OVERVIEW

CLASSICS:

MANUAL - Manual is a user controlled program in which the resistance remains as set level unless you decide to change it.

INTERVAL - Interval is an efficient workout that strengthens your cardiovascular system by alternating work intervals and recovery intervals. Be sure to challenge yourself with intense work intervals.

FAT BURN - Fat Burn is a program designed to target your stored body fat. This program is generally used at a slightly lower resistance level but runs for longer durations than other programs.

RANDOM - Random is a workout that will give you a different workout every time you workout. The resistance levels will change randomly, providing a challenging workout.

HRT PROGRAMS:

TARGET HRT - Target HRT allows you to set your target heart rate. The machine will automatically change resistance levels to keep you at your preset heart rate target. The user must grasp the hand pulse sensors or wear a telemetric heart rate chest strap during use.

HRT WEIGHT LOSS - HRT Weight Loss is a lower intensity workout that will help your body burn a higher percentage of calories from your body's fat reserves. The user must grasp the hand pulse sensors or wear a telemetric heart rate chest strap during use. The program will automatically adjust resistance to keep you at 65% of your predicted maximum heart rate.

HRT INTERVAL - HRT Interval alternated between effort intervals of 80% and 70% of your predicted maximum heart rate. This program is designed to increase your cardiovascular fitness capacity. The user must grasp the hand pulse sensors or wear a telemetric heart rate chest strap during use.

HRT HILL - HRT Hill increases your intensity level from 65% to 70% to 75% to 80% of your predicted maximum heart rate to promote cardiovascular strength and endurance.

TRAILS:

TRAIL 10K - Trail 10K is a distance based program that ends after you complete the 10K. See if you can beat your previous time!

TRAIL 15K - Trail 15K is a distance based program that ends after you complete the 15K.

TRAIL 20K - Trail 20K is a distance based program that ends after you complete the 20K.

WATTS PROGRAMS:

CONSTANT WATTS - Constant Watts allows you to set your target WATT output (energy output). The resistance will change automatically to keep you at your target watts.

INTERVAL WATTS - Interval Watts allows you to choose a high watts value and a low watts value. The interval program will switch between high and low watts values, making for a very intense and effective workout.

HILL WATTS - Hill Watts lets you choose four watt levels. Each watt level will change at 1 minute intervals and repeat until your preset workout time is over. Perfect for a challenging workout.

SPRINT 8 - Sprint 8 is an anaerobically based interval program. It is effective in recruiting fast twitch muscle fibers and improving athletic performance.

FITNESS TEST - Fitness Test is a heart rate based fitness test. The test lasts 5 minutes and is based on your V02 level and maximum heart rate achieved to provide an accurate fitness level. This is a great program to track your increase in fitness levels. The user must grasp the hand pulse sensors or wear a telemetric heart rate chest strap during use.

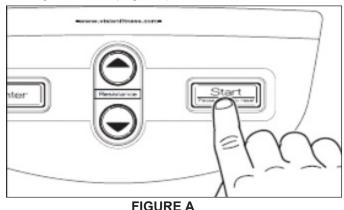
CUSTOM PROGRAMS - Custom 1-5 allows the user to preset up to 5 workout profiles. You have the ability to save or change the workouts whenever you wish. During initial setup, the program will function as a Manual program. Change your resistance levels as you want. At the end of the workout, the console will ask if you would like to save your workout. Press and hold ENTER to save the workout you just completed.

4.3 USING THE PROGRAMS

USING THE PROGRAMS

SELECTING QUICK START - The easiest way to begin exercising is to simply press the START key (Figure A). You will begin exercising in a Manual resistance program in which you can change the resistance levels to meet your goals. Current default settings will be used to determine exercise feedback

SELECTING A PROGRAM - Each program has its own program button (Figure B). Some programs buttons have multiple programs. Press the key of the program that you would like to use. You can use the UP or DOWN ARROW keys or press the program key repeatedly to scroll through the different program options.



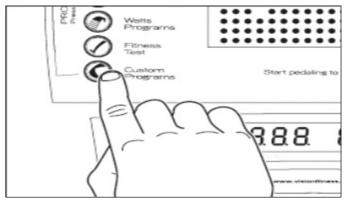
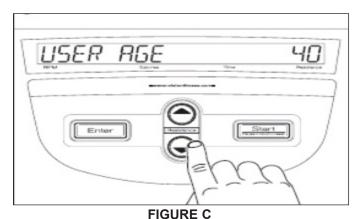


FIGURE B

ENTERING AGE - When prompted by the message center to enter your age, use the UP or DOWN ARROW keys to adjust the displayed age to the correct value (Figure C). This information is necessary for the HRT programs and will affect your % Heart Rate feedback.

ENTERING TIME - When prompted by the message center to enter your time, use the UP or DOWN ARROW keys to adjust the displayed time to a desired value (Figure D).



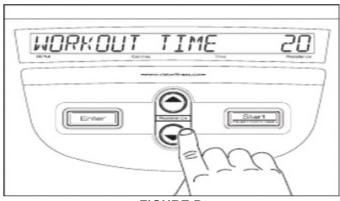


FIGURE D

4.3 USING THE PROGRAMS - CONTINUED

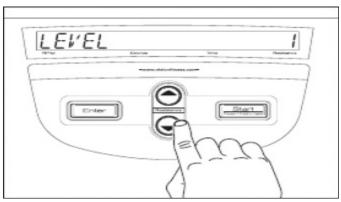
USING THE PROGRAMS - Continued

ENTERING RESISTANCE - When prompted by the message center to enter level, use the UP and DOWN ARROW keys to adjust the displayed resistance level (Figure E). There are 20 levels of resistance to choose from in each program. The maximum resistance level varies by program.

ENTERING WEIGHT - When prompted by the message center to enter weight, use the UP and DOWN ARROW keys to adjust the displayed weight to equal your current body weight (Figure F). This information is necessary to give accurate exercise feedback for calorie and MET calculations.

ENTERING WATTS - The Watts program will ask you to set the desired watt level instead of resistance levels. The Watts level will range from 40 to 250 in increments of five.

ENTERING TARGET HRT - The HRT programs will set your target heart rate in the place of resistance level. The console will display your target heart rate and give you the opportunity to adjust this value if you wish.



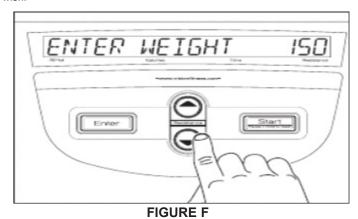


FIGURE E

SPRINT 8 - The Sprint 8 program is an aerobic interval program designed to build muscle, improve speed, and naturally increase the release of Human Growth Hormone (HGH) in your body. Producing HGH through exercise and a proper diet has been shown as an effective way to burn fat and build lean muscle mass according to Phil Campbell, author of Ready, Set, GO! Synergy Fitness. Please go to Mr. Campbell's website, www.readysetgofitness.com for more details about this radical new approach to fitness.

The Sprint 8 program features intense sprint intervals followed by recovery intervals. The program includes the following phases:

- 1) WARM UP should gradually increase your heart rate and increase respiration and blood flow to working muscles. The warm up is controlled by the user to meet your specific needs.
- 2) INTERVAL TRAINING starts immediately after the warm up with a 30 second sprint interval. Seven recovery intervals of one minute and 30 seconds will alternate with the eight 30 second sprint intervals. The message display will prompt you to increase your pedal rate during the sprint interval and decrease pedal rate during the recovery interval. A difference of 30 to 50 RPM between interval and recovery interval is recommended.
- 3) COOL DOWN helps return your body's systems to resting levels. Less demand is placed on your heart during recovery if an appropriate cool down is used following the exercise.

Due to the fact that Sprint 8 is a specialized program, total workout time is not displayed during the program. The interval time is displayed in the time window instead. It takes only 20 minutes to complete the Sprint 8 workout.

CHAPTER 5: ENGINEERING MODE

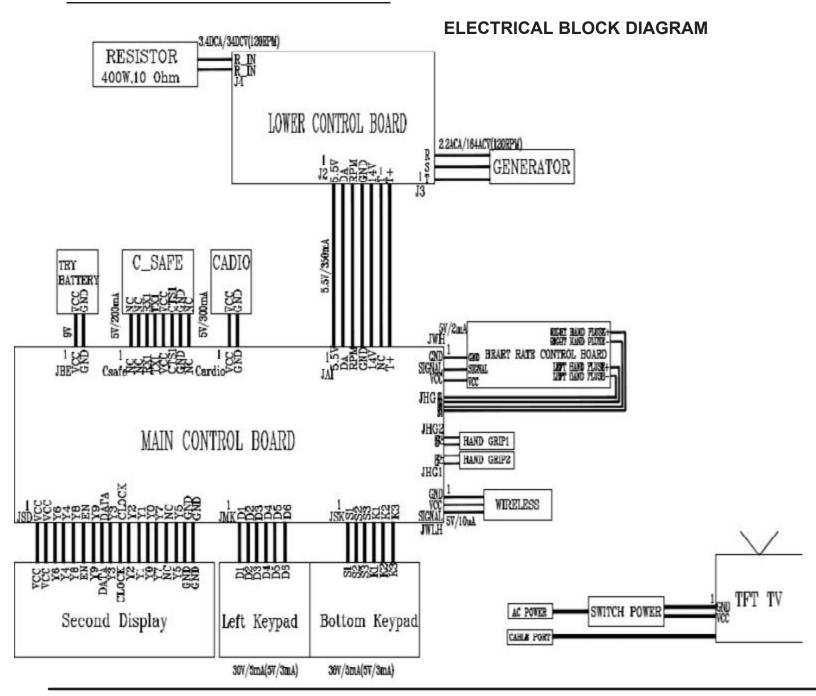
5.1 ENGINEERING MODE

The Engineering Mode allows the club owner to customize the bike for the club.

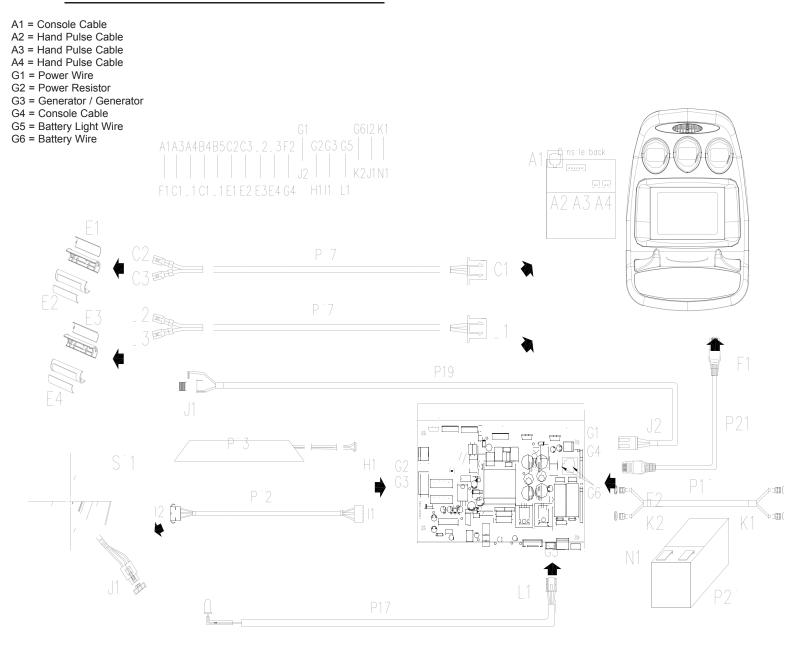
- 1) To enter Engineering Mode, press and hold down the UP and DOWN ARROW keys at the same time for 3-5 seconds.
- 2) The console will beep 3 times and enter into the Engineering Mode menu.
- 3) To scroll through the list of options in Engineering Mode, use the UP and DOWN ARROW keys. Each of the custom settings will show on the display.
- 4) To select a custom setting, press the ENTER key when the desired setting is shown.
- 5) To change the value of the setting, use the UP and DOWN ARROW keys.
- 6) To confirm and save the value of the setting, press and hold ENTER for 3 seconds.
- 7) To back out of a setting or to exit the Engineering Mode, press and hold START for 3 seconds.

CUSTOM SETTINGS	DEFAULT	MINIMUM	MAXIMUM	DESCRIPTION
MAX TIME	99	5	99	Maximum workout duration.
USER TIME	60	5	99 (LIMITED TO MAX TIME SETTING)	Default start time in all programs.
DEFAULT AGE	40	10	100	Default age used for all programs.
DEFAULT WEIGHT	150	80	400	Default weight used for all programs.
DEFAULT LEVEL	1	1	20	Default level used for all programs.
DEFAULT GENDER	MALE	FEMALE	MALE	Default gender used for all programs.
UNIT	MILE	KM	UNIT	Sets the unit to miles or kilometers.
MACHINE	BIKE	BIKE	ELLIPTICAL	Sets the machine to bike or elliptical mode.
ACCUMULATED TIME	-	-	-	Shows the total time on the bike in hours.
ACCUMULATED DISTANCE	-	-	-	Shows the total distance on the bike in miles or kilometers.
DISPLAY TEST	-	-	-	Used by service technicians to test the LED displays.
MACHINE TEST	-	-	-	Used by service technicians to test mechanical and CSafe functions.
KEYPAD TEST	-	-	-	Test to ensure that all buttons are functioning properly.
VERSION	-	-	-	Displays current software version.
LANGUAGE	-	-	-	Sets the language that the prompts use in the instruction center.

6.1 ELECTRICAL DIAGRAMS

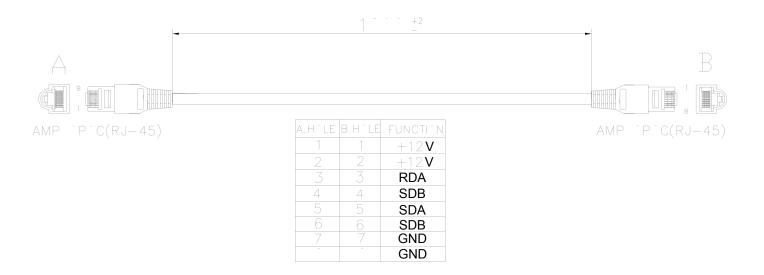


6.1 ELECTRICAL DIAGRAMS



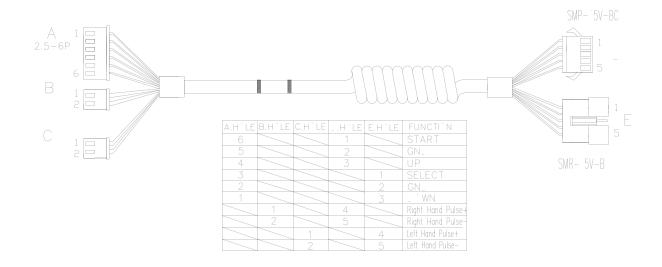
6.1 ELECTRICAL DIAGRAMS

P21 - CONSOLE CABLE



6.1 ELECTRICAL DIAGRAMS

P04 - PULSE SENSOR WIRE



6.2 TROUBLESHOOTING - CONSOLE POWER ISSUES

NO DISPLAY ON THE CONSOLE OR THE DISPLAY IS DIM

POSSIBLE CAUSES:

- 1) The console is damaged or the console cable is not connected properly.
- 2) Poor connection to the terminals on the lower board.
- 3) The lower board is damaged.
- 4) The Generator is damaged.

SOLUTION

- 1) Check the console cable connections at the console and lower board.
- 2) Unplug the console cable at the console. Use a multi-meter to check if the voltage between the 1 (VCC) and 8 (Ground) pins of the console cable is greater than 12 VDC (Figure A).
 - a. If the voltage is greater than 12 VDC, replace the console.
- 3) Open the side covers and check the lower board LEDs. If the +12V LED is not lit, replace the battery.
- 4) Unplug the generator cable from the lower board and check to see if the voltage is variable (See Section 6.2 for how to check the power).
 - a. If the voltage is variable, replace the lower board.
 - b. If the voltage is NOT variable, replace the generator.

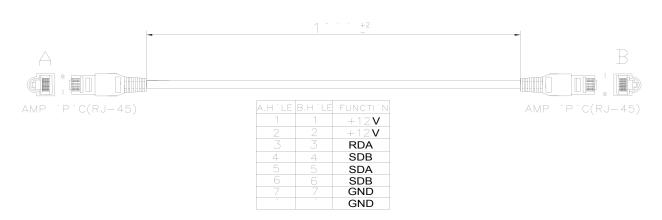


FIGURE A

6.3 TROUBLESHOOTING - NO OR HIGH RESISTANCE

NO RESISTANCE CHANGE OR ALWAYS HIGH RESISTANCE

POSSIBLE CAUSES:

- 1) The console is damaged or the console cable is not connected properly.
- 2) The console cable is damaged.
- 3) The generator is damaged.
- 4) The lower board is damaged.

SOLUTION:

- 1) Check the console cable connections at the console and lower board.
- 2) Unplug the generator cable from the lower board and pedal the machine. Use a multi-meter to check the VAC (AC voltage) readout from the generator cable (Figures A & B).
 - a. The VAC should vary depending on how fast the unit is pedaled.
 - b. If the VAC is not variable, replace the generator.
 - c. If the voltage is variable, replace the lower board.
 - d. If the issue is not resolved by the generator or lower board, replace the console.
 - e. If the issue is still not resolved, replace the console cable.





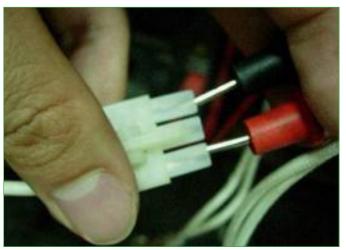


FIGURE A FIGURE B

6.4 TROUBLESHOOTING - NO RPM DISPLAYED

NO RPM IS DISPLAYED DURING EXERCISE

POSSIBLE CAUSES:

- 1) The generator is damaged or the console cable is not connected properly.
- 2) The console is damaged.
- 3) The lower board is damaged.

SOLUTION:

- 1) Open the side covers and check the lower board LEDs. The RPM LED should have light.
- a. If the RPM LED is not lit, check the generator for variable power (see Section 6.2 for how to check the power). Replace the generator if variable power is not present.
- 2) If the RPM LED is lit, but the console does not show the RPM, replace the console cable.
 - a If the console cable does not resolve the issue, replace the console.
 - b. If the console cable and console do not resolve the issue, replace the lower board.

6.5 TROUBLESHOOTING - NOISE ISSUES

KNOCKING OR CREAKING NOISES

POSSIBLE CAUSES:

- 1) The pedal is connected to the crank arm too loosely.
- 2) Belt tension is too loose, or the belt is dirty.
- 3) The crank is damaged.
- 4) The drive axle assembly is damaged.

SOLUTION:

- 1) Open the side covers and clean and tighten the belts.
- 2) Tighten the connections between the pedal and crank arm.
- 3) Replace the crank.
- 4) Replace the drive axle assembly.

6.6 TROUBLESHOOTING - HEART RATE ISSUES

HEART RATE DOES NOT WORK

POSSIBLE CAUSES:

- 1) Not good contact between the user and HR grips or HR strap.
- 2) The HR strap is at a low battery status.
- 3) The HR strap is damaged.
- 4) The HR grips are damaged.
- 5) The HR board in the console is damaged.

SOLUTION:

- 1) Re-center the HR strap on user's chest as shown in Figure A.
- 2) Replace the battery in the HR Strap.
- 3) Wet the user's hand, then reestablish contact with the HR grip.
- 4) Replace the HR strap.
- 5) Replace the HR grips.
- 6) Replace the console.

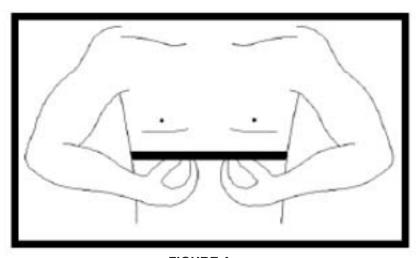


FIGURE A

7.1 CONSOLE BACK REPLACEMENT

- Remove the 4 screws holding the back of the console to the console (Figure A).
 Remove the console back (Figure B).



FIGURE A



FIGURE B

3) Reverse Steps 1-2 to install a new console back.

7.2 CONSOLE REPLACEMENT

- 1) Remove the console back as outlined in Section 7.1.
- 2) Remove the 4 screws holding the console to the console mast (Figure A).
- 3) Disconnect the 3 wire connections (5 if a TV is present) to the console and remove it (Figure B).





FIGURE A

FIGURE B

4) Reverse Steps 1-3 to install a new console. **NOTE:** If a TV is not present, 2 of the wires coming up the console mast will not be used, a coax cable and a 4 pin connector)(Figure C).



FIGURE C

5) Test the bike for function as outlined in Section 7.14.

7.3 HEART RATE HANDLEBAR REPLACEMENT

- 1) Remove the 2 bolts on each side holding the heart rate handlebars to the console mast (Figure A).
- 2) Remove the heart rate handlebars.



FIGURE A

- 3) Reverse Steps 1-2 to install a new heart rate handlebar.4) Test the bike for function as outlined in Section 7.14.

7.4 HEART RATE GRIPS REPLACEMENT

- 1) Remove the 2 screws holding the 2 sides of the heart rate grip together (Figure A).
- 2) Remove the heart rate grip from the heart rate handlebars (Figure B).

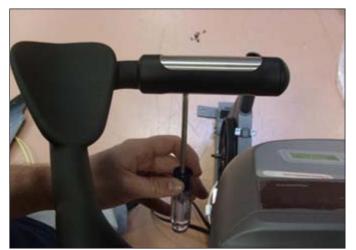




FIGURE A

FIGURE B

- 3) Reverse Steps 1-2 to install new heart rate grips. **NOTE:** The white wire goes to the bottom heart rate plate, the red wire goes to the top heart rate plate. Also be sure to re-install both heart rate grip end caps.
- 4) Test the bike for function as outlined in Section 7.14.

7.5 CONSOLE MAST REPLACEMENT

- 1) Remove the console back as outlined in Section 7.1.
- 2) Remove the console as outlined in Section 7.2.
- 3) Remove the heart rate handlebars as outlined in Section 7.3.
- 4) Lift up the console mast boot and remove the 3 bolts on each side holding the console mast to the frame (Figure A).
- 5) Pull the console mast up and off the unit while simultaneously pulling the console cable wires out the bottom of the console mast (Figure B).





FIGURE A

FIGURE B

- 6) Reverse Steps 1-5 to install a new console mast.
- 7) Test the bike for function as outlined in Section 7.14.

7.6 SEAT POST REPLACEMENT

- 1) Turn the pin counter-clockwise with a 17mm wrench (Figure A).
- 2) Remove the seat pin (Figure B).





FIGURE A

FIGURE B

3) Pull up on the seat post and pull it off the unit (Figure C).



FIGURE C

4) Reverse Steps 1-3 to install a new post.

7.7 PEDAL REPLACEMENT

- 1) Use a 15mm pedal wrench to turn the pedal bolt (counter-clockwise for the right pedal, clockwise for the left pedal)(Figure A).
- 2) Remove the pedal (Figure B).





FIGURE A

FIGURE B

3) Reverse Steps 1-2 to install a new pedal.

7.8 SIDE COVER REMOVAL

1) Use a flat screwdriver to turn the cover over the crank arm counter-clockwise and remove it (Figures A & B).





FIGURE A

FIGURE B

2) Remove the 14mm nut holding the crank to the drive axle (Figures C & D).







FIGURE D

7.8 SIDE COVER REMOVAL - CONTINUED

3) Use a 22mm crank puller (Vision Fitness part # ZMS2000030) to remove the crank (Figures E & F).





FIGURE E

FIGURE F

- 4) Remove the seat adjustment pin and seat post as outlined in Section 7.6. Also remove the seat post boot.
- 5) Remove the 10 screws holding each side cover to the frame and remove the side covers (Figures G & H).



7.9 LOWER CONTROL BOARD REPLACEMENT

- 1) Remove both side covers as outlined in Section 7.8.
- 2) Remove the 2 screws holding the lower control board to the frame (Figure A).
- 3) Disconnect the 3 wire connections at the lower control board and remove the board (Figure B).





FIGURE A FIGURE B

- 4) Reverse Steps 1-3 to install a new lower control board. NOTE: Be sure to re-attach the 3 wire connections removed in Step 3 (Figure C).
- 5) Test the bike for function as outlined in Section 7.14.



7.10 DRIVE BELT REPLACEMENT

- 1) Remove both of the side covers as outlined in Section 7.8.
- 2) Remove the bolt holding the idler tension spring to the frame (Figure A). Once this bolt is removed, the idler can be pivoted to remove the tension from the drive belt (Figure B).





FIGURE A

FIGURE B

- 3) Remove the 3 bolts on each side holding the secondary pulley assembly to the frame (Figure C).
- 4) Loosen the 15mm nut on each side holding the generator to the frame (Figure D).

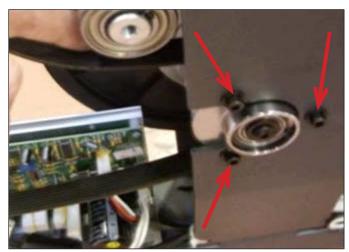


FIGURE C



FIGURE D

7.10 DRIVE BELT REPLACEMENT - CONTINUED

- 5) Loosen the 11mm eye hook nut on each side holding the generator from sliding in the frame (Figure E).
- 6) Slide the generator towards the rear of the unit (Figure F).





FIGURE E

FIGURE F

- 7) When the generator is slid towards the back of the frame, the tension on the generator belt is reduced so that the belt can be removed from around the pulley portion of the secondary pulley assembly (Figure G).
- 8) Once the generator belt is removed from around the pulley, the secondary pulley assembly can be slid towards the rear of the unit so that the drive belt can be removed (Figure H).



FIGURE G



FIGURE H

- 9) Reverse Steps 1-8 to install a new drive belt.
- 10) Test the bike for function as outlined in Section 7.14.

7.11 GENERATOR BELT REPLACEMENT

- 1) Remove both of the side covers as outlined in Section 7.8.
- 2) Remove the bolt holding the idler tension spring to the frame (Figure A). Once this bolt is removed, the idler can be pivoted to remove the tension from the drive belt (Figure B).





FIGURE A

FIGURE B

- 3) Remove the 3 bolts on each side holding the secondary pulley assembly to the frame (Figure C).
- 4) Loosen the 15mm nut on each side holding the generator to the frame (Figure D).

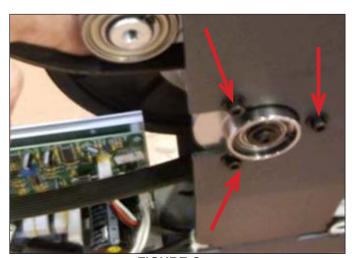


FIGURE C



FIGURE D

7.11 GENERATOR BELT REPLACEMENT - CONTINUED

- 5) Loosen the 11mm eye hook nut on each side holding the generator from sliding in the frame (Figure E).
- 6) Remove the bolt preventing the generator disc from spinning (Figure G).





FIGURE E

FIGURE F

- 7) Slide the generator towards the rear of the unit (Figure G).
- 8) When the generator is slid towards the rear of the unit, the tension on the generator belt is reduced so that the belt can be removed from around the pulley portion of the secondary pulley assembly (Figure H).



FIGURE G



FIGURE H

7.11 GENERATOR BELT REPLACEMENT - CONTINUED

- 9) Once the generator belt is removed from around the pulley on the secondary pulley assembly, the generator can be pulled towards the front of the unit so that the generator belt can be removed from around the generator pulley (Figure I).
- 10) Once the generator belt is removed from around the generator pulley, the secondary pulley assembly can be slid toward the rear of the unit so that the generator belt can be completely removed from the secondary pulley assembly (Figure J).





FIGURE I FIGURE J

- 11) Reverse Steps 1-10 to install a new generator belt. **NOTE:** Be sure to tension the new generator belt so that it can be twisted a maximum of 45 degrees (Figure K).
- 12) Test the bike for function as outlined in Section 7.14.



FIGURE K

7.12 GENERATOR REPLACEMENT

- 1) Remove both of the side covers as outlined in Section 7.8.
- 2) Remove the bolt holding the idler tension spring to the frame (Figure A). Once this bolt is removed, the idler can be pivoted to remove the tension from the drive belt (Figure B).





FIGURE A FIGURE B

- 3) Remove the 3 bolts on each side holding the secondary pulley assembly to the frame (Figure C).
- 4) Loosen the 15mm nut on each side holding the generator to the frame (Figure D).

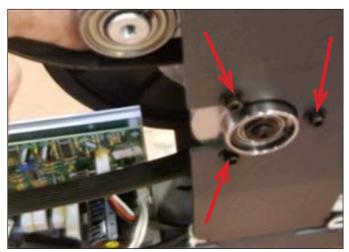






FIGURE D

7.12 GENERATOR REPLACEMENT - CONTINUED

- 5) Loosen the 11mm eye hook nut on each side holding the generator from sliding in the frame (Figure E).
- 6) Remove the bolt preventing the generator disc from spinning (Figure F).



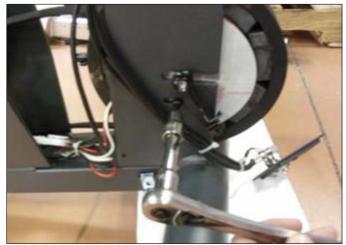


FIGURE E

FIGURE F

- 7) Slide the generator towards the rear of the unit (Figure G).
- 8) When the generator is slid towards the rear of the unit, the tension on the generator belt is reduced so that the belt can be removed from around the pulley portion of the secondary pulley assembly (Figure H).



FIGURE G



FIGURE H

7.12 GENERATOR REPLACEMENT - CONTINUED

- 9) Once the generator belt is removed from around the pulley on the secondary pulley assembly, the generator can be pulled towards the front of the unit so that the generator belt can be removed from around the generator pulley (Figure I).
- 10) Unplug the generator wire and cut any wire ties holding the generator wire to the frame (Figure J).





FIGURE I FIGURE J

- 11) Once the generator belt is removed from the generator pulley and the generator wire is unplugged, the generator can be removed from the front end of the frame (Figure K).
- 12) Reverse Steps 1-11 to install a new generator. **NOTE:** Be sure to tension the new generator belt so that it can be twisted a maximum of 45 degrees (Figure L).
- 13) Test the bike for function as outlined in Section 7.14.







7.13 DRIVE AXLE SET REPLACEMENT

- 1) Remove both of the side covers as outlined in Section 7.8.
- 2) Remove the drive belt as outlined in Section 7.10.
- 3) Remove the snap ring holding the drive axle set into the frame (Figure A).
- 4) Use a hammer or a mallet on the left side of the frame to remove the drive axle set from the right side of the frame (Figure B). **NOTE:** The drive axle bearings will be damaged during the removal process. New bearings are included with the new drive axle set.







FIGURE B

- 5) Reverse Steps 1-4 to install a new drive axle.
- 6) Test the bike for function as outlined in Section 7.14.

7.14 TESTING THE BIKE

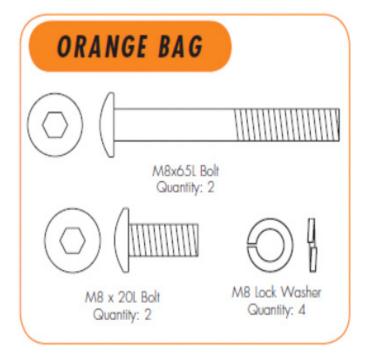
ONCE THE UNIT OR REPLACEMENT PART IS FULLY INSTALLED AND ASSEMBLED AND PROPERLY PLACED ON THE FLOOR, USE THE FOLLOWING INSTRUCTIONS TO TEST THE MACHINE:

- 1) Without hitting start or entering any program modes, sit on the bike and hold the handlebars while pedaling to simulate exercising. While moving, listen for any odd noises or squeaks.
- 2) After stopping movement, press the START button and begin pedaling.
- 3) Grasp the hand grips to check for proper heart rate response.
- 4) Press the level up and down buttons on the console to make sure resistance is fully functional.
- 5) If everything functions properly, stop pedaling and the unit will reset to normal operation within 30 seconds.

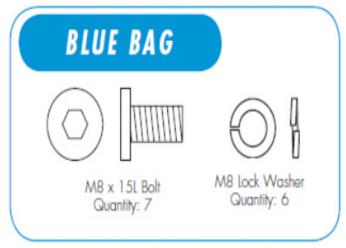
8.1 UNPACKING THE BIKE

The Vision Fitness U70 Bike is carefully inspected before shipment, so it should arrive in good operating condition. Vision Fitness ships the bike in the following pieces:



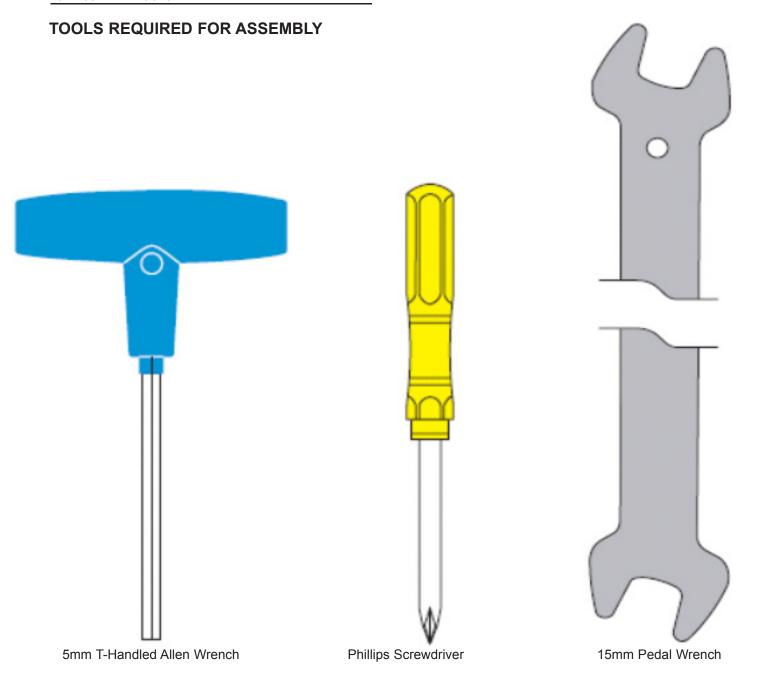




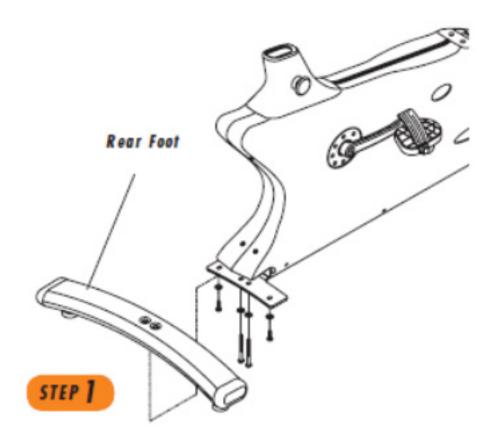


NOTE: If these parts are missing from the package, please contact Vision Fitness at 1-800-335-4348.

8.2 ASSEMBLY TOOLS



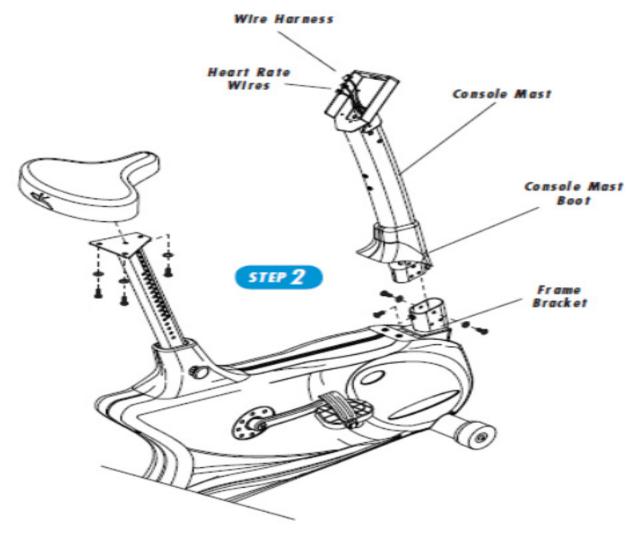
8.3 ASSEMBLY INSTRUCTIONS



STEP 1 - ORANGE BAG

1) Install the rear foot with four lock washers (M8), two inside bolts (M8 \times 65L), and two outside bolts (M8 \times 20L). Tighten with the 5mm T-Shaped Allen Wrench.

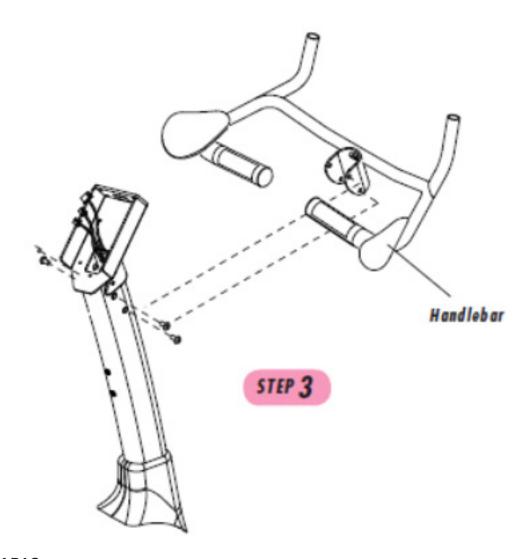
8.3 ASSEMBLY INSTRUCTIONS - CONTINUED



STEP 2 - BLUE BAG

- 1) Slide the console mast boot onto the console mast.
- 2) Unfold the wire harness located in the console mast frame bracket. Connect it to the wire tie coming from the bottom of the console mast. Pull the wire tie and wire harness up through the top of the console mast while simultaneously sliding the mast into the frame.
- 3) Secure the mast to the frame using six lock washers (M8), and six bolts (M8 x 15L). Tighten with the 5mm T-Shaped Allen Wrench. Place the seventh bolt (M8 x 15L) in the rear of the frame bracket and tighten until snug.
- 4) Slide the console mast boot down and set it in place on the side cover.
- 5) Remove the nuts (M8) from the bottom of the seat. Attach the seat to the seat post with the nuts you just removed. Tighten with the 15mm wrench.

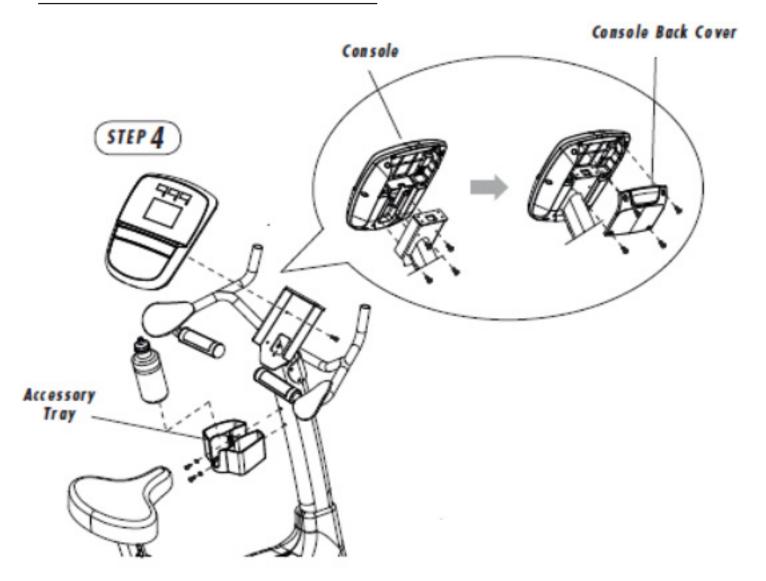
8.3 ASSEMBLY INSTRUCTIONS - CONTINUED



STEP 3 - PINK BAG

¹⁾ Feed the heart rate wires of the handlebar through the small hole located in the front of the console mast. Pull these wires up through the hole at the top of the console mast. Attach the handlebar to the console mast using four bolts (M8 x 20L). Tighten with the 5mm T-Shaped Allen Wrench.

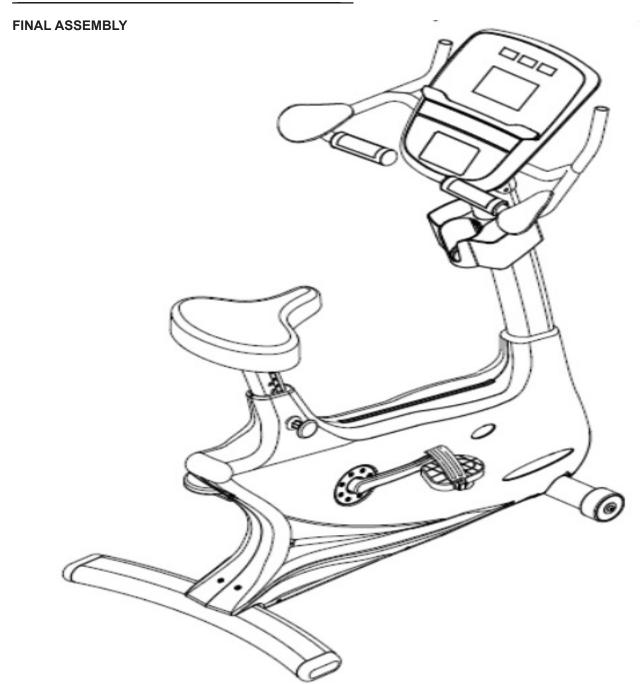
8.3 ASSEMBLY INSTRUCTIONS - CONTINUED



STEP 4 - CONSOLE

- 1) Remove the four mounting bolts from the back of the console and four screws holding the console back cover on with the Phillips Screwdriver. Plug in the wire harness and the two heart rate wires to the back of the console. Attach the console to the console mast with the four bolts removed earlier in this step.
- 2) Plug in the 9 volt battery. Re-attach the console back cover with the four screws removed previously.
- 3) With the Phillips Screwdriver, remove the 2 bolts located half way up the console mast. Attach the accessory tray to the console mast the two bolts.

8.3 ASSEMBLY INSTRUCTIONS - CONTINUED

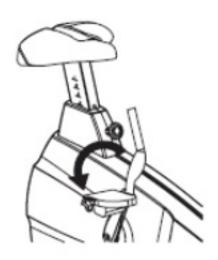


8.4 ADJUSTING THE PEDAL STRAPS AND SEAT

ADJUSTING THE PEDAL STRAPS

The straps are designed to fit your individual foot size and should be adjusted tight enough to keep your foot from slipping. The pedals include spring loaded clips for easy adjustment. To tighten the strap, pull down the open end of the strap. To loosen the strap, push down on the top of the clip and pull the strap up. Release the clip to lock the strap in place.





ADJUSTING THE U70 SEAT

The U70 bike uses a simple pull pin adjustment knob to adjust the seat height. To adjust the seat, grab hold of the seat and pull the seat post knob out. Raise or lower the seat to its desired position and release the seat post knob. Push down on the seat to make sure that the pin is secure in the seat rail.

To determine the proper seat position, sit on the seat and position the ball of your foot on the center of the pedal. Your knee should bend slightly at the furthest pedal position. You should be able to pedal without locking your knees or shifting your weight from side to side.



8.5 LEVELING THE BIKE

STABILIZING THE VISION FITNESS U70 BIKE

After positioning the bike in its intended location, check its stability by attempting to shake it side to side. Shaking or wobbling indicates that your bike needs to be leveled. Determine which leveler is not resting completely on the floor. Loosen the nut with one hand to allow the leveler to rotate. Rotate the left or right leveler, and repeat the adjustment as necessary until the bike is stable. Lock the adjustment by tightening the nut against the rear foot support.



NOTES



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